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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/005,043	12/04/2001	Thomas I. Yeh	88413.000002	9524

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EXAMINER	
CHANG, JUNGWON	
ART UNIT	**PAPER NUMBER**
2154	

DATE MAILED: 09/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/005,043	YEH ET AL.	
	Examiner	Art Unit	
	Jungwon Chang	2154	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *05 June 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-14* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-14* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. This Action is in response to Amendment filed on 6/5/06, which has been fully considered.

2. Amended claims 1-14 are presented for examination.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. **Claims 1, 2, 4, 6-9, 11, 13 and 14** are rejected under 35 U.S.C. 103(a) as being unpatentable over Rostoker et al. (US 6,131,125), hereinafter Rostoker, in view of Deen et al. (US 2002/0112084), hereinafter Deen.

5. As for claims 1 and 8, Rostoker discloses a method and system for connecting one of a plurality of industrial machines having different data format and storage configurations to a communications medium for remote monitoring and control, the method comprising:

(a) storing data in predetermined locations and in a predetermined format, and storing data translation configuration information relating to the at least one of the

industrial machines in a memory (col. 3, lines 34-54; col. 7, lines 39-53);

(b) configuring an electrical interface for direct connection to at least one of the industrial machines in response to the stored electrical interface configuration information and directly connecting the interface to the machine (col. 2, lines 18-36; col. 3, lines 34-54; Fig. 1C, Fig. 3B);

(c) receiving machine data from the industrial machine and sending data to the industrial machine through the configurable directly connectable electrical interface responsive to the configuration information (col. 3, line 55 – col. 4, line 3);

(d) configuring a data translator in response to the stored data translation configuration information for receiving data from the interface and transforming the data to the predetermined format in the data translator responsive to the data translation configuration information (col. 7, lines 1-24);

(e) reading data from and writing data to the predetermined locations in the memory with a processor responsive to the data translation configuration information (col. 6, lines 53-67; col. 7, lines 1-24); and

(f) connecting a communications port to the communications medium (col. 1, lines 49-62; Figs. 1C and 3B).

4. Rostoker discloses storing data translation configuration information in a memory (col. 3, lines 34-54; col. 7, lines 39-53). However, Rostoker does not specifically disclose storing both electrical interface configuration information and data translation configuration information. Deen discloses storing both electrical interface configuration

information and data translation configuration information (24, fig. 5; figs. 6-7; page 2, 0011-0014; page 4, 0036, "serial command translation module 78 uses in translating the device connectivity protocol command into an appropriate serial command for a legacy device; page 4, 0037, "serial configuration data module 84 includes those data that are used to configure serial port 1 for serial communication with device 42"; page 4, 0038-0040; page 5, 0046, "device 1 serial configuration data module 84 includes data that is designed to configure serial port 1 for communication with device 42"; page 5, 0047). It would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the teachings of Rostoker and Deen because Deen's storing both information would enable devices to join together in a network and use services provided the respective devices with generally minimal configuration overhead (Deen, page 4, 0034).

5. As for claims 2 and 9, Rostoker discloses the method and system of claims 1 and 8, further comprising including data transform information in the information relating to the industrial machine, and the data translator is responsive to the data transform information (col. 7, lines 39-53).

6. As for claims 4 and 11, Rostoker discloses the system and method of claims 1 and 8, further comprising storing the configuration information in a non-volatile memory (ROM, col. 7, lines 39-53).

7. As for claims 6 and 13, Rostoker discloses the system and method of claims 1 and 8, further comprising processing both electrical interface configuration information and data translation configuration information and loading the configuration information into the memory in a configuration processor separate from the apparatus and removably connectable to the apparatus (col. 6, lines 53-67).

8. As for claims 7 and 14, Rostoker discloses the system and method of claims 1 and 8, further comprising retaining both electrical interface configuration information and data translation for a plurality of industrial machines in the configuration information (col. 7, lines 39-53).

5. **Claims 1-4, 7-11, and 14** are rejected under 35 U.S.C. 103(a) as being unpatentable over Heidhues et al. (US 6,032,203), hereinafter Heidhues, in view of Deen et al. (US 2002/0112084), hereinafter Deen.

9. As for claims 1 and 8, Heidhues discloses a method and system for connecting one of a plurality of industrial machines having different data format and storage configurations to a communications medium for remote monitoring and control, the method comprising:

(a) storing data in predetermined locations and in a predetermined format, and storing data translation configuration information relating to the at least one of the industrial machines in a memory (col. 5, lines 41-64);

(b) configuring an electrical interface for direct connection to at least one of the industrial machines in response to the stored electrical interface configuration information and directly connecting the interface to the machine (col. 4, lines 19-44; Fig. 1);

(c) receiving machine data from the industrial machine and sending data to the industrial machine through the configurable directly connectable electrical interface responsive to the configuration information (col. 4, lines 19-44; col. 5, lines 27-64);

(d) configuring a data translator in response to the stored data translation configuration information for receiving data from the interface and transforming the data to the predetermined format in a data translator responsive to the configuration information (col. 4, lines 19-44; col. 5, lines 27-64; Fig. 4);

(e) reading data from and writing data to the predetermined locations in the memory with a processor responsive to the data translation configuration information (col. 4, lines 19-44; col. 5, lines 27-64; Figs. 4 and 5); and

(f) connecting a communications port to the communications medium (col. 3, line 41 - col. 4, line 18; Fig. 1).

10. Heidhues discloses storing data translation configuration information in a memory (col. 5, lines 41-64). However, Heidhues does not specifically disclose storing both electrical interface configuration information and data translation configuration information. Deen discloses storing both electrical interface configuration information and data translation configuration information (24, fig. 5; figs. 6-7; page 2, 0011-0014;

page 4, 0036, "serial command translation module 78 uses in translating the device connectivity protocol command into an appropriate serial command for a legacy device; page 4, 0037, "serial configuration data module 84 includes those data that are used to configure serial port 1 for serial communication with device 42"; page 4, 0038-0040; page 5, 0046, "device 1 serial configuration data module 84 includes data that is designed to configure serial port 1 for communication with device 42"; page 5, 0047). It would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the teachings of Heidhues and Deen because Deen's storing both information would enable devices to join together in a network and use services provided the respective devices with generally minimal configuration overhead (Deen, page 4, 0034).

11. As for claims 2 and 9, Heidhues discloses the method and system of claims 1 and 8, further comprising including data transform information in the information relating to the industrial machine, and the data translator is responsive to the data transform information (col. 5, lines 27-64).

12. As for claims 3 and 10, Heidhues discloses the system and method of claims 1 and 8, further comprising coupling a display to the processor for displaying the data to a user (col. 4, lines 19-44)

13. As for claims 4 and 11, Heidhues discloses the system and method of claims 1

and 8, further comprising storing the configuration information in a non-volatile memory (col. 10, lines 32-43).

14. As for claims 7 and 14, Heidhues discloses the system and method of claims 1 and 8, further comprising retaining both electrical interface configuration information and data translation for a plurality of industrial machines in the configuration information (col. 5, lines 27-64, Fig. 1).

15. **Claims 3 and 10** are rejected under 35 U.S.C. 103(a) as being unpatentable over Rostoker, Deen, further in view of Fackler et al. (US 5,729,204) (hereinafter Fackler).

16. As for claims 3 and 10, because Rostoker teaches using an attached apparatus to update configuration information in the memory (col. 6, lines 53-67), it could be argued that such an apparatus would inherently include a display for displaying data to a user. However, Rostoker does not explicitly disclose coupling a display to the processor for displaying data to a user. Fackler teaches coupling a display to the processor of an interface device similar to claims 1 and 8 for the purpose of displaying data to a user and updating information stored in memory (Fig. 6; col. 15, lines 42-57). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Rostaker by using a display coupled to the processor for displaying data to a user in order to update information stored in memory, as taught by Fackler above.

17. **Claims 5 and 12** are rejected under 35 U.S.C. 103(a) as being unpatentable over Rostoker, Deen, in view of Khan et al. (US 6,088,624) (hereinafter Khan).

18. As for claims 5 and 12, Rostoker does not specifically disclose storing the configuration information in a removable memory. Khan teaches storing configuration information in removable memory for the purpose of configuring the device for additional machines (discs 33, Fig. 1; col. 4, lines 3-10). It would have been obvious to one of ordinary skill in the art to modify Rostoker by storing the configuration information in removable memory for the purpose of configuring the device for additional machines, as taught by Khan above.

19. **Claims 5 and 12** are rejected under 35 U.S.C. 103(a) as being unpatentable over Heidhues, Deen, in view of Khan.

20. As for claims 5 and 12, Heidhues does not specifically disclose storing the configuration information in a removable memory. Khan teaches storing configuration information in removable memory for the purpose of configuring the device for additional machines (discs 33, Fig. 1; col. 4, lines 3-10). It would have been obvious to one of ordinary skill in the art to modify Heidhues by storing the configuration information in removable memory for the purpose of configuring the device for additional machines, as taught by Khan above.

21. **Claims 6 and 13** are rejected under 35 U.S.C. 103(a) as being unpatentable over Heidhues in view of Dew (US 5,963,450).

22. As for claims 6 and 13, Heidhues does not specifically disclose the use of a configuration processor separate from the apparatus and removably connectable to the apparatus. However, Dew discloses a programmable interface apparatus and method similar to claims 1 and 8, further comprising a configuration processor separate from the apparatus and removably connectable to the apparatus for processing configuration information and loading the configuration information into the memory (PC 74, Fig. 3; col. 5, lines 37-42, "A PC based data...communication networks."). It would have been obvious to one of ordinary skill in the art to modify Heidhues with the teachings of Dew by adding a configuration processor separate from the apparatus and removably connectable to the apparatus in order provide a user interface for user control and configuration of the controller, as taught by Dew (col. 2, lines 51-62, "Data from each slave...each slave device.").

Response to Arguments

23. Applicant's arguments with respect to claims 1-14 have been considered but are moot in view of the new ground(s) of rejection.

24. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jungwon Chang whose telephone number is 571-272-3960. The examiner can normally be reached on 9:30-6:00 (Monday-Friday).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John A Follansbee can be reached on 571-272-3964. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jungwon Chang
Primary Examiner
September 1, 2006